THE VETERINARY RECORD

A Weekly Journal for the Profession.

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

No. 1536. DECEMBER 15, 1917. VOL. XXX.

VETERINARY SURGEONS AND CIVIC SERVICE.

At their recent meeting, a report of which we printed last week, the members of the Midland Counties V.M.A. were able to congratulate their colleague, Mr. T. Chambers, upon his election as Mayor of Dudley. Such appointments are always honourable, and are especially so just now; for a Mayor taking office is entrusted with heavier responsibilities than in normal times. Most veterinarians, therefore, will join the Midland members in congratulating Mr. Chambers; but probably many will do so with a tinge of accompanying regret that such appointments should still be comparatively rare amongst us.

Quite a number of veterinary surgeons, not all of them widely known in the profession, have served a term as Mayors of towns or boroughs. Probably every member could name a few, some still with us, others no longer living. Yet it must be confessed that their number is still low. It is distinctly an unusual thing for a veterinary surgeon to become a Mayor, and those who know the profession understand why.

The essential preliminary to a Mayoralty is a fairly long record of service upon the Corporation; and, broadly speaking, veterinary surgeons do not engage freely in this or any other public work. Very many medical men and solicitors aspire to a share in the public life of their localities as the natural accompaniment of a successful professional career; but comparatively few veterinary surgeons do so. After making allowance for the numerical disproportion between the professions we cannot deny that doctors and lawyers, taken collectively, are far more ready to enter public life than we are.

The records of those of our members who have taken their part in public life show that a veterinary surgeon may rise in it almost or quite as easily as other professional men. Here, as in some other fields of industry, many members have opportunities of doing good service, but few utilise them.

THE SOMME V.M.A.

The initiation of an association in one of our camps behind the fighting line in France—a note of which we are enabled to print this week, per favour Major Fred. Hobday, promises a much more "live" affair than its prototypes at home here usually are. Their cases are plentiful, their meetings frequent, and the broad similarity in the practice will ensure a more general ground for comparison and discussion than is found in the divergencies of ordinary practice. Apparently there is little chance of reports of the meetings reaching us in a form to enable us to present them to our readers.

ACUTE ARTICULAR RHEUMATISM IN THE HORSE—RHEUMATIC FEVER.

On 18th November, a big Shire gelding, seven years' old and in good condition, was taken lame whilst walking with an empty cart. On the 19th I attended and found the horse blowing, very lame off-hind with considerable swelling from hock to fetlock. A physic ball was given, diuretic powders left, with cooling lotion for leg.

On the 20th the lameness was just as acute, leg still swollen, temp. 106, pulse 80, conjunctiva injected, urine high coloured, and an anxious expression of countenance. The ordinary fever draught was given three times daily, with cooling lotion to leg.

This was continued until the 24th, when the opinion was formed that the horse was suffering from acute rheumatic fever with endocarditis: temp. still 106, pulse 80 to 88.

The following mixture was now given:—

Mag. Sulph.	℥iss.
Sodae bicarb.	℥ss.
Sodae Salicylas	ʒiii.
Ext. Digitalis P.D.	♏x.

T. i. d.

With belladonna liniment and hot fomentations to fetlock.

From now on the temperature gradually came down, but pulse became quicker and weaker. The horse lay down regularly until the 27th, when he was put in slings and appeared to get great relief, but on 5th December he became worse and had to be taken out of the slings; the temperature now being 102, pulse 120.

On the 6th the animal was in a state of collapse; temp. 101, pulse 130, so that it was decided to destroy him.

The P.M. showed acute synovitis of the fetlock joint, with straight furrows on the articular cartilages from before backward. There was a small spot of erosion of the cartilage of the suffraginis at its juncture with the sesamoid bones; the quantity of synovia did not appear excessive.

The heart muscle had a boiled and streaky look, with commencing vegetations of the endocardium in the left auricle, just above the insertion of the mitral valve.

My excuse for this description of the case is that it is rare; I can only recall having seen one other and that was only recognised as acute arthritis.

For a fuller description of the disease I would refer those interested to Wallis Hoare's work, which will fill in the blanks in this somewhat vague record of a case.

V. S.

TETANUS.

We have recently had various views regarding the treatment of tetanus put before us, but unfortunately do not appear to have struck a reliable remedy for this serious complaint, so that when one is confronted with a case the question arises, What treatment shall I adopt here?

Reports have been published in which the treatment appeared so successful that only a few days of it were necessary for the animal to be able to be discharged cured.

The cases which one has had recover have, as a rule, been under treatment for a lengthy period, and this has caused one to ask oneself the question, Was any particular drug the antidote, or did recovery take place in spite of the drugs? I have not been able to find a satisfactory answer.

It appears to be agreed that some cases are hopeless from the commencement; that others with very little attention will recover. The first named have evidently absorbed a large dose of the toxin, and are often of a nervous and irritable disposition; whilst, presumably, the second have only had a small dose of the toxin, and are of a quiet and contented disposition. The intermediate cases are those in which the toxin appears to be absorbed freely into the system, and the animal has a quiet disposition.

The treatment one has generally followed has been to give as soon as possible an aloes ball, other drugs being given per rectum as enemas. Those used have been a combination of Extract of belladonna, Carbolic acid, and Iodide of potassium in water. Salol has been tried because of its being a carbolic compound, and sometimes one has thought with good results.

The animal has been placed in a quiet loose box; whatever food the animal would take has been given. If unable to take food per orem enemas have been given. When there has been any doubt regarding the animal being able to keep on its feet it has been put into slings.

Tetanus serum has been given. In the case of a foal which contracted the disease through docking by a neighbouring farmer, the foal was re-docked and treated entirely with serum. It made a good recovery.

During the present year we have had three cases of tetanus: one in a yearling after castration; two in mares, one of which had had a slight sore on her side, made by the plough chains, the other had cast a shoe and pricked her foot; the disease appeared after the foot had been treated by the smith, and healed.

The colt was put into slings, given a dose of physic and treated with injections of the drugs previously mentioned. His legs suffered from the prolonged standing (a month), but he is now a useful animal. The first mentioned mare had a comparatively mild attack. She was given a physic ball, and being able to eat a little, was given Belladonna and Pot. iodide in her 'foot. Hypodermically serum was given; 500 units per injection daily for five days, except on the second and fifth, when she was given double quantity. A second aloes ball was given on the seventh day. She appeared to be losing ground, the mucous membranes were dirty, appetite failing. After the ball had operated she was much brighter and improved rapidly; by the fifteenth day she had practically recovered. It was never necessary to put her into slings.

The second mare was given a dose of physic, followed by enemas of Bellad., Pot. iodide, and Salol. Belin's treatment was tried in addition (*V. R.*, Oct. 27/17) on the second day. Twenty c.c. of a solution of Permanganate of potash, 3 in 1000, was given intravenously. The foot was dressed down to the quick until it bled freely, where the prick had been, and the wound so made packed with powdered Permangate of potash.

The intravenous injection was repeated the following day in the opposite jugular, double the quantity being injected. A considerable amount of swelling took place at the seat of inoculation, therefore it was not gone on with. Perhaps the heavy weight of the mare's iron-bound hoof planted spasmodically on the operator's foot reduced his enthusiasm.

On the third day she was put into slings. From then until the tenth day, 1000 units of serum were given daily. As no fæces were passed a dose of Physostigmin and Pilocarpin were given on the third day. This was repeated on the tenth, fifteenth, nineteenth and twenty-second days.

On the fifteenth day the medicated enemas were stopped, and Chlorate of potash was given in the drinking water.

On the twentieth day a decided improvement was noticeable, and on the twenty-third she was taken out of the slings for a few minutes, and moved carefully about, the owner was instructed to take her out every day and exercise as much as the mare could bear without being distressed.

On the 28th day the mare could walk fairly well and eat naturally. There were no signs of tetanic spasms.

The owner nursed the mare well. She could drink a little during the whole time, but about the fourteenth day her prospects of recovery appeared very remote. She tried to eat a little hay but it had to be pulled out of her mouth, as she was unable to swallow it. The bowels would not act normally. From the sixteenth day they were stimulated to action once a day by soap and water enemas. On the 23rd they commenced operating well, and the mare was able to eat well.

In this case the good nursing played an important part. The use of slings and the hypodermic injections of Eserin and Pilocarpin vital parts. The intravenous injections were thought to be beneficial. Had they been persisted in the course of the disease might have been shorter. Whether the other drugs and serum played any active part or not, as I have said previously, I cannot satisfy myself. Perhaps our worthy editor will welcome a discussion on the subject in *The Veterinary Record*.

E. H. Pratt.

ABSTRACTS FROM FOREIGN JOURNALS.

The Physiological Properties and Therapeutic Action of Carbonic Anhydride.

H. Roger published a long article upon this question in *La Presse Medicale*. For a long time carbonic anhydride was regarded as a useless and dangerous residue which was eliminated by the respiratory apparatus. Brown-Sequard, however, deduced from his investigations that CO_2 discharges an important function in the economy, and serves to stimulate the nervous centres. This conception has been resuscitated in recent years, and has given rise to much work. In the words of modern physiologists, CO_2 is the hormone upon which devolves the direction of the respiratory mechanism. But, useful as CO_2 may be, it should not be concluded that its innocuity is absolute.

When air containing 1.5% of CO_2 is inhaled, the proportion of the gas in the pulmonary aveoli and the blood augments rapidly. A new equilibrium is established; and the respiration continues calm and regular, but more ample and more rapid. A proportion of 20% is easily supported, upon condition that the experiment is not greatly prolonged, as at the end of a few days the animals die, and death appears due to the excessive work of the respiratory apparatus. If 30% of the gas is used, the animals die in a few hours; or if 60% is used, in thirty minutes.

CO_2 also acts upon the circulation. As can be demonstrated in asphyxia, its accumulation elevates the blood pressure and renders the cardiac movements more slow and more energetic. If the tenor in CO_2 diminishes, the heart becomes accelerated; and, if it falls to a very low figure the cardiac movements succeed one another with such rapidity that the heart remains in an almost tetanic condition. When the reduction of CO_2 is less marked, but is prolonged, lowering of the blood pressure and tachycardia are observed; the veins and capillaries lose tone, and the animal falls into a state of very grave prostration, apparently similar to nervous shock and mountain sickness.

Thus, like many other substances, CO_2 exercises two opposite actions upon the heart. In small doses it acts as a tonic; in larger doses it is toxic, and produces relaxation of the myocardium.

Carbonic anhydride appears necessary to the satisfactory functioning of the nervous centres and to the maintenance of their reflex excitability. When an animal has been submitted to hyperrespiration, and the exaggerated ventilation of the lung has made the reserve of CO_2 diminish and disappear, the nervous system loses its excitability.

The anæsthetising properties of CO_2 brought into evidence by Brown-Sequard, have for some time been ntilised in the treatment of painful wounds, and especially of burns. For the same reason, vaginal douches of CO_2 have been recommended in the treatment of uterine affections. Even in cancer, the disappearance of the pain, the disinfection of the discharges, and the diminution or suppression of the fœtor are obtained by its use.

The anæsthetising properties of CO_2 are utilised when ærated waters are prescribed against dyspeptic troubles, gastralgia, or vomiting. The sensitiveness of the mucous membrane diminishes under their influence, and the reflex accidents of which the mucous membrane is the starting-point are suppressed.

The therapeutic action of CO_2 is completed by an excitation of the muscular fibres of the digestive tube. CO_2 provokes contraction of unstriped muscles. This is proved very simply by compressing the trachea of a young rabbit, when intestinal movements are perceived under the abdominal wall, which is very thin at that age.

These facts are of practical application. It is classic to use clysters of ærated water in the treatment of obstinate constipation and even of occlusion. Here the CO_2 acts by provoking contractions sufficiently strong to overcome the obstacle. Ærated waters are also used against tuberculosis, and in the treatment of laryngitis or chronic bronchitis. In these cases the favourable influence of CO_2 must be somewhat complex; for inhalations of it act in turn upon the bronchial secretions, the microbes contained in them, the contraction of the bronchial muscles, and finally upon the respiratory centres, the innervation of which they stimulate.

Upon the blood the action of CO_2 is not less important. The experiments of Koranyi and Berce have proved that the CO_2 contained in the venous blood changes the dynamic and chemical relations between the plasma and the globules. The electric conductivity, the viscosity of the blood, and the refractive power of the serum, are profoundly modified. Kossa has proved that the phosphaturia following asphyxia is due to an action exercised by CO_2 upon the hæmatics, which liberate phosphoric acid. Having an action upon all the cells of the economy, CO_2 exercises a marked influence upon nutrition. The influence upon the blood is also manifested by an augmentation of the bactericidal power.

New physiological discoveries suggest the substitution of inhalations of a mixture of CO_2 and oxygen for those of oxygen in many cases in which the latter have been employed. Paul Bert's classic conception of mountain sickness, universally accepted, is that it is due exclusively to the rarefaction of the oxygen. Mosso's studies now suggest a new theory, according to which the most important factor in the disease is the diminution of CO_2. This is demonstrated by the fact that the symptoms of mountain sickness, which do not cease upon inhalations of pure oxygen, disappear immediately if the patient respires a mixture of CO_2 and oxygen, especially if the inert nitrogen is excluded, and the two active gases alone used.

Etters Levi has proved that a mixture of CO_2 and oxygen containing 20% of CO_2 arrests the accidents of surgical anæsthesia. An animal experimentally intoxicated by injections of morphine and inhalations of chloroform, in which the symptoms are aggravated if pure oxygen is inhaled, regains the normal in a few seconds by means of inhalations of a mixture of CO_2 and oxygen. This method has

been used with full success to combat the accidents with chloroform in some surgical cliniques of Florence. It may even, perhaps, be employed as a preventive of accidents, by adding to the frequently employed anæsthetic mixture of Oxygen and chloroform a proportion of from 2 % to 5 % of CO_2.

Etters Levi has also studied the effect of inhalations of CO_2 in cases of Cheyne-Stokes breathing. In this condition inhalations of oxygen alone prolong the period of apnea, while inhalations of CO_2 and oxygen cause it to disappear.

It is possible that in many cases in which inhalations of oxygen give good results, mixtures of oxygen and CO_2 would give better. In many pulmonary affections, their stimulation upon the respiratory centres might render the pulmonary ventilation more active. They might also serve to combat troubles following the inhalation of irritant gases.—(*Revista de Higiene y Sanidad Pecuarias*).

W. R. C.

ROYAL COUNTIES VETERINARY MEDICAL ASSOCIATION.

[National V.M.A.—Southern Branch.]

A general meeting was held at 50 Friar St., Reading, on Friday, Nov. 30. After tea had been partaken of, the chair was occupied by the President, Mr. J. Willett; and there were also present: Messrs. J. W. McIntosh, Hugh A. MacCormack, R. J. Verney, and the Secretary, Mr. G. P. Male; also two visitors: Messrs. A. Kirke, M.R.C.V.S., and B. Gunn, M.R.C.V.S.

It was resolved that the minutes as published in the veterinary journals be taken as read.

Apologies for absence were sent by Messrs. W. T. D. Broad, Marlborough; J. C. Coleman, Swindon; S. H. Slocock, Hounslow; F. Bazley, Devizes; H. G. and T. Lepper, Aylesbury; and J. H. Parker, Faringdon; J. McKerlie, Hungerford; G. E. King, Abingdon.

A letter was also read from Mr. J. Sutcliffe Hurndall, South Kensington, in which he asked the members to accept his resignation owing to reasons of health.

The Hon. Secretary stated that Mr. Hurndall had for some time past been considering his resignation and had of late been unable to attend the meetigns.

The President proposed that the resignation be occepted with great regret, and feelingly alluded to the great services that Mr. Hurndall had rendered to the Association for a number of years.

Mr. Verney seconded the motion, and said that Mr. Hurndall was one of the earliest members of the Association and had been most active and regular in his attendance.

The resolution was passed.

Mr. W. N. Thompson, M.R.C.V.S., London, was proposed for membership by the President, who said what a very valuable and useful member Mr. Thompson had been to the Central Society.

Mr. McIntosh seconded the proposal, which met with unanimous acceptance.

Mr. Esmond Brown, M.R.C.V.S., of the Board of Agriculture, was proposed as a member by the Hon. Sec.

Mr. MacCormack seconded, and the President supported the motion, remarking that Mr. Brown's scientific attainments would be of great benefit to the Association.

This proposal was also carried unanimously.

The Hon. Secretary said that he had not always the opportunity to invite other members of the profession to join their Association, but he hoped that every member would remember the Association, and extend a hearty invitation to any of those with whom they came into contact.

Election of Officers.

The election of Officers for the ensuing year was next proceeded with.

Mr. McIntosh proposed that Mr. Willett should be asked to undertake the office of President for another year. The present was a very inopportune time to make a change, and owing to the difficulties in railway facilities, and the fact of so many members of the profession being in the army, country members were not able to attend the meetings as often as they would like. Mr. Willett was within easy distance of Reading and had filled the post with such distinction for the last two years that he hoped he would see his way to continue for another year.

Mr. MacCormack seconded, and endorsed all that had been said as to the good work that the President had put in for the Association. Although he realised that it meant extra work, he hoped that Mr. Willett would again consent to become President. He thought it would be hardly fair to ask a new man to undertake the office at this juncture. Every President wished to have his fling, and with a paucity of attendance the present was not quite the time for this to be done.

Mr. Willett thanked the members. He stated that he thought some other member should be asked to fill the position, preferably one from the country. He was of opinion that the Presidential office should only last for one year. His time was so fully occupied that he felt he must decline the honour.

After further remarks by Mr. Verney and the Hon. Secretary, Mr. Willett was induced to again occupy the chair on the understanding that he should be relieved of the Presidential address.

The Vice-Presidents: Messrs. W. A. Hancock, W. T. Broad, J. Parker, and R. J. Verney, were re-elected *en bloc*, on the motion of the President seconded by Mr. MacCormack.

The President proposed that Mr. G. P. Male be again elected Hon. Secretary and Treasurer, and thanked him for his past services.

This was seconded and carried.

Mr. Male thanked the members for their kind remarks, and said that under the circumstances he would consent to act for another year. He found it very difficult indeed with his small staff to do the extra work involved, but he hoped that he would get more encouragement from the members by attending the meetings more regularly. He apologised for not arranging more papers, but expiained that he could scarcely ask men to read a thesis when there were so few members turned up to hear it. He would, however, do his best to carry on.

Mr. H. A. MacCormack was elected Auditor on the proposition of the President, seconded by Mr. McIntosh.

Veterinary Surgeons and the Army.

Mr. Male brought to the notice of the members the action of the Royal College of Veterinary Surgeons in issuing instructions to Tribunals throughout the country not to exempt veterinary surgeons of certain categories irrespective of the needs of the community. He related a case of one of his assistants who was exempted by the local Tribunal with a special recommendation that his serviees would be far more useful in his present capacity, and strongly advising that he should remain in his present employ. That exemption was unanimously advised by the Tribunal and the Advisory Committee. The Military Representative, however, at once raised an objection, as, he said, he had a circular from the Royal College of Veterinary Surgeons saying that veterinary

surgeons should not be exempted. Consequently no further action could be taken in the matter. Now the Royal College was petitioning the War Office to allow students who were in their early years of training, and who were already trained soldiers to take up their studies. And they gave as a reason that there was a great scarcity of members of the profession in the country and that the live stock would consequently suffer. Surely that was very inconsistent. Live stock were more valuable now than they would be some years hence, after the war, and it was of the most vital importance to preserve the lives of cows and horses, of which there was a great shortage. The students now being trained would be of no use to the country for several years, in which time, it was hoped, the war would be over, and large numbers of temporary veterinary surgeons now serving with the army would again take up their civil practices. It seemed almost an insult to dictate to local tribunals who knew the needs of the district and the work that was being done by a practitioner. Whether they exempt a man or not should be left to their discretion. It was not a personal matter, for ten men, two qualified assistants, and a dispenser were already serving, and had he been fit, he would have entered the army at the beginning of the war. He (Mr. Male) proposed the following resolution: "That in view of the great scarcity of veterinary surgeons, especially in country districts, the members of this Association think it advisable that the matter of exempting veterinary surgeons should be left to the discretion of local Tribunals, knowing as they do the conditions prevailing in their particular districts."

Mr. McINTOSH seconded the motion, and said that he thought it a very inconsistent policy on the part of the Royal College to wish for men to leave the army to complete their training, and at the same time to advise that trained veterinary surgeons should be taken from districts where they were badly needed, to go into the army. That policy had multiplied the number of "quacks" all over the country, and it would be most difficult to eradicate that evil after the war. It was not with any lack of patriotism that he seconded the motion, but he thought it was a matter of most vital national importance that the health of the live stock of this country should be preserved.

The PRESIDENT also spoke in support of the resolution, which met with the unanimous approval of the meeting.

MORBID SPECIMENS AND INTERESTING CASES.

Mr. VERNEY exhibited two very extraordinary and interesting morbid specimens. The first was the os pedis and os coronæ of a valuable Shire mare, showing a remarkable exostosis round the pedal joint, with ulceration of all the articular surface of the pedal bone. The animal to which it belonged was seen in consultation with another veterinary surgeon. It was extremely lame, holding the foot up and putting no weight on it. The hair was cut off round the coronet, but there was no enlargement or evidence of any injury or suppuration. The mare continued very lame although she was blistered several times, and he advised that she should be slaughtered. She was kept for about twelve months, and when seen again there was a large prominence at the coronet. There was no history of the horse having received any injury.

Mr. McINTOSH said that he had a number of somewhat similar cases in London from treads which caused severe lameness followed by arthritis.

Mr. VERNEY said there was no evidence of a tread. He thought it might have been caused by slipping in the stable.

The PRESIDENT held the view that it was not of traumatic origin, as in that case there would have been a suppurating arthritis and the animal would not have survived a twelve-month; she would have been unable to stand owing to the pain, and would have died, probably from septic pneumonia.

Mr. MALE said he had seen great lameness caused by the penetration of the hoof at the coronary band by sharp bodies, such as blackthorns, pieces of wood, etc. The hoof had closed over, so that it was sometimes very difficult indeed to see where the bodies had penetrated. After a time pus formation resulted, but owing to thickness of the skin the pus did not always appear externally but set up acute arthritis. He thought from the appearance of the exostosis that this was a similar case.

The second specimen was the distal phalanges of a horse which had been unnerved on December 3, 1909, and which had worked until Oct. 1, 1917, drawing coal, and part of the time in a cab. It had not been lame but walked on its heels, and the hoof was deformed. The os pedis and the navicular bone were completely anchylosed by a very extensive deposit of bone which also involved the os coronæ. He (Mr. Verney) thought it very remarkable that a horse could have worked for that length of time with a bone so extensively diseased.

The PRESIDENT thanked Mr. Verney for showing such interesting specimens. He thought that they were both worthy of being placed in the museum of the College.

Mr. MALE raised the question whether the exostosis was due to the disease which had caused the original lameness or whether it was the result of unnerving.

In answer, Mr. Verney stated that the animal had been operated upon for navicular disease and at that time the legs were perfectly clean. He thought the growth was due to both causes.

The PRESIDENT related a case on which he asked the opinion of the meeting. The subject was a hunter gelding, seven years old, which he was called to see. Its temperature was 102, pulse hardly perceptible but the heart beats were visible from a distance, and they did not correspond with the pulse. The animal fed well but rapidly lost flesh and grew weak, until, on the eighteenth day, it was destroyed as being of no further use. A post-mortem examination being made the heart was found to be enormously enlarged and dilated. Its weight was 22¾ lbs. The curious part about the case was that the horse was working regularly until the day on which he (the President) saw it, and it had fed well until the last. The hypertrophy was not of recent origin. Evidently the wastage was due to the blood not being oxidised properly; but it would be interesting to know what was the exciting cause of the excessive enlargement of the heart.

In answer to Mr. McIntosh, Mr. Willett said there were no lesions on the valve and the heart muscle was not paler than usual, the lungs were normal, and the liver appeared to be sound. He had no history of any febrile disease.

Mr. McINTOSH thought it was a most unusual case He expressed the opinion that the hypertrophy had probably been there for some time, but when dilatation took place the temperature rose, the animal got weak and death soon resulted.

Mr. MALE said there were many cases found at post-mortem examinations to have dilatation of the heart, but they showed no signs of it during life. This case was unusual owing to the excessive hypertrophy.

Mr. MALE recorded the case of a hunter mare, about seven years old. It was showing all the symptoms of broken wind in an excessive degree. It had no rise in temperature and fed well, but had the characteristic cough, the double flank movement and the dilatation of the nostrils, also peculiar to the disease. The animal had been brought up from grass about three weeks, and put in an airy box with the window open. He gave a guarded prognosis, and thought that though the horse might be useful for hacking it would never be able to do a day's hunting. He treated the animal, and advised

that it should be turned out on the grass for several hours each day. To his surprise he received a letter from the owner in about a fortnight saying that the animal appeared to be normal, and that it was being exercised preparatory to hunting. Mr. Male asked the members for their opinion, and stated that he had several somewhat similar cases this year. He suggested that it might possibly be due to the climatic conditions, but considered it most probable that these wases were due to the animal being taken up from grass and brought into a box. Had the animal been turned out for a short period each day it probably would not have happened.

Mr. VERNEY said he had two similar cases which each occurred on the same farm. One horse was caught up from grass and put in the plough. There had been some difficulty in catching it, and it had galloped about a good deal. It began to blow and was stopped from work. When seen it had no temperature and no catarrh but showed all the signs of broken wind. He administered 1 oz. doses of glyco-heroin every few hours and in three days the animal was quite right again. The other horse had been recently purchased and was put in the same box as the previous case, when it also became affected. He thought it might be due to some organism, and advised that the box be thoroughly disinfected.

In answer to Mr. McIntosh he stated that there was no tympany or congestion of the lungs.

After other interesting cases had been discussed the meeting terminated with a vote of thanks to the Chairman.

G. P. MALE, M.R.C.V.S., Hon. Sec.

THE SOMME VETERINARY MEDICAL ASSOCIATION.

A suggestion was started that a Veterinary Medical Association at a centre "somewhere in France" would be likely to be beneficial to those veterinary officers who were stationed in the neighbourhood, and the outcome of it was that the following officers met together on October 29th:—Col. Newsom, C.M.G., D.D.V.S.; Majors Learing, D.S.O.; Hobday, Porteous, and MacArthur; Capts. Burton, Ferguson, Player, Marks, MacMahon, Braund, Watson, and Finch; Lieuts. Mettam and Bloye.

Before the meeting two interesting hospital cases were shown by Major Hobday: one a case of "arrested development" in a seven-year-old horse, and the other a case of paralysis of flexor metatarsi muscle.

After an address by Col. Newsom, explaining the objects and mutual benefits accruing from such an association, it was decided that meetings be held each week (or each fortnight, as circumstances permitted) on Mondays, at 5.30; and it was unanimously agreed that the Society be called the "Somme Veterinary Medical Association." Col. Newsom, C.M.G., was unanimously elected President, the Vice-Presidents being Col. Kendal, Maj. Leaning, D.S.O., and Maj. Hobday. Lieut. Mettam was appointed Secretary.

As qualifications for membership, it was decided that all must be duly qualified veterinary officers in the Army Veterinary Corps; and as visiting members it decided to admit all veterinary officers of the Allied Forces, all lay officers attached to the Directorate or the Veterinary Service of the Army Veterinary Corps.

In regard to subjects for discussion, it was unanimously agreed that "subject headings" were preferable to actual papers, and a number of titles were suggested for consideration; such, for example, as:—

1. The Organisation of the Army Veterinary Corps—(*a*) At the Front; (*b*) Mobile Sections; (*c*) In the Hospitals.
2. The Pros and Cons of Clipping.
3. Certain diseases—such as Glanders, Cell ulitis Epizootic Lymphangitis, Stomatitis, Mange Ringworm, and others.
4. Mallein: Its uses, vagaries, etc.

The first subject was selected for the next meeting, to be held on November 5th, and Col. Newsom promised to address the members upon it.

THE CAMEL AND ITS DISEASES. Being Notes for Veterinary Surgeons and Commandants of Camel Corps. By H. E. CROSS, M.R.C.V.S., D.V.H., A.SC., Indian Civil Veterinary Department, Camel Specialist to the Punjab Government. Pp. viij + 151, including index, with 48 figures in the text. Price 5/- net. (Bailliére, Tindall, & Cox. 8 Henrietta Street, Covent Garden, London. 1917.)

Another small handbook on the Camel is now before us, written in this instance partially to meet the needs of Commandants of Camel Corps as well as those of Veterinary Surgeons. It briefly surveys the purchase, loading, and feeding of camels, methods of restraint, all the principal and some of the minor medical and surgical troubles of the animal and their treatment, with short sections upon anæsthesia and castration. It concludes with two appendices, one of vernacular names of diseases and the other of vernacular names of fodders used for camels in the Punjab, both of which are likely to be very helpful to, at least, some readers just now. In addition, there is a chapter on camel breeding, by Major G. E. M. Hogg, a specialist in the subject, whose contribution, though informative, would be more so if it were not so discursively written. The medical and surgical parts of the work, which occupy by far the greater portion of its bulk, are more satisfactory. Here and there—as in some of the directions regarding methods of restraint—we come upon descriptions that might have been more clearly worded; and some subjects, such as anæsthesia, are distinctly too briefly dealt with. At times, too, the work appears to suffer a little from a strictly veterinary point of view on account of having been partially written for unprofessional readers—some information had to be inserted for their benefit which a veterinary surgeon might safely be presumed to possess. On the whole, however, the author has made good use of his small space, and has produced a work which, elementary as it is, will be very serviceable to a considerable number of readers. It is true that one of the chief effects of its perusal has been to impress us still further with the need for a much larger and more detailed work upon the subject; but, in the meantime, this little volume will assist many.

W. R. C.

Disease in Horses.—Forfarshire.

At a meeting of the directors of the Highland and Agricultural Society of Scotland, held in the Society's hall, 3 George IV. Bridge, Edinburgh, on Wednesday 8th inst., it was reported on behalf of the Science Committee that a letter was received from Mr. Hugh Martin, Flowerdale, drawing attention to the prevalence in certain districts of Forfarshire and Perthshire of a disease affecting horses at grass, from which very serious losses had occurred during recent years. An investigation into the subject had been carried out by Professor Dewar, Edinburgh, and Mr. T. M. Inglis, M.R.C.V.S., Forfar, and a copy of their report was submitted, from which it appeared that they ascribed the disease to the eating of alsike clover at a particular stage of its growth, *viz.*, immediately before flowering, at which stage the plant was supposed to develop certain poisonous properties.

It was agreed to recommend that Prof. M'Alpine and Dr. Tocher be asked to visit the fields, examine the pastures, and collect all available data, and that Mr. Martin be asked to form a local committee of farmers who would point out the fields, and give all available information.

Mr. Martin said the disease made its appearance in Forfarshire about four or five years ago, and it was now spreading to Perthshire. It was a serious matter. He knew one farm, not far from his own place, on which four horses had died, and on another farm a pair had succumbed. Such investigation as was proposed would be of great advantage.—*The Scottish Farmer.*

The Merits of the Mule.

A Queensland paper says :—

"Descended originally from the species of wild ass inhabiting the rocky semi-desert of Upper Egypt, where food is scarce and the heat intense, the Jacks transmit to their hybrid progeny the faculty of resisting privation and withstanding tropical heat, which horses do not possess.

The testimony of those who have had experience of both horses and mules is convincing as to the superiority of the latter. They live longer, and are able to withstand the effects of hard work for a greater number of years ; they are constitutionally stronger, and less liable to sickness ; they can be kept on coarser and cheaper food, and they are hardier and able to resist extremes of temperature, especially heat. Their narrow and small hoofs make them more sure-footed than horses, and they can pick their way over the mountains and on the edge of precipices without much risk of disaster, and in positions such as these show more pluck and caution than horses.

It is conceded at once that a mule is not as fast as a horse, and the heaviest draught mules are not as good as the heavier horses for actual pulling power ; but an ordinary team of mules will beat the ordinary team of horses for pulling and for travelling great distances where food is scarce.

There are two distinct types of jacks in Europe. Those for getting heavy draught mules are bred in Poitou, in the West of France. The height of these is about 15 hands. In America, where hundreds of thousands of mules are bred each year, the Spanish or Catalonian jacks are the most popular. The Kentucky mules are famous all over America, and owe their fame to two Catalonian jacks imported to America in about 1830 or 1840, and crossed with the ordinary female donkeys of the State, they have produced a most useful strain of mule-breeding jacks. So highly appreciated are mules in the West States that, in 1890, 150,000 mules were foaled. At the present time something like 200,000 are foaled annually. In America one sees them doing heavy dock work and railway work, in the country ploughing and ordinary farm work, and they are invaluable in mining and pack work. They will carry over 200 lb. over rough, high country if properly loaded.

It has been proved they will pull better if a mare is in the lead, for, having been foaled and brought up by mares, they have a great affection for horses, and a dislike for asses. It is generally considered that three mules can be kept on fodder that would only be sufficient for two horses. The objection to mules on the score of bad temper and obstinacy may be dismissed by the remark that, in the opinion of competent judges, these so-called vices are the outcome of mismanagement and cruelty to beasts of highly-nervous temperament, which require kindness and intelligence in handling."

SUBSCRIPTIONS TO R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons begs to acknowledge the receipt of the following subscriptions for 1917 :—

A. E. Darwell, Leigh, Lancs.	£1	1	0
J. A. Griffiths, East Africa	1	1	0
M. C. Tailby, Birmingham	1	1	0
Previously acknowledged	925	6	0
	£928	9	0

ARMY VETERINARY SERVICE

Buckingham Palace, Dec. 12.

The following had the honour of being received by The King this morning, when His Majesty, invested them with the Insignia of Companions of the Orders into which they have been admitted :—

THE DISTINGUISHED SERVICE ORDER.

* * * *

Major DAVID TURNBULL, Army Veterinary Corps.

Extracts from *London Gazette*,

WAR OFFICE, WHITEHALL, Dec. 10.

REGULAR FORCES ARMY VETERINARY CORPS.

To be temp. Lieut. :—P. F. Wilson (Nov. 22).

Temp. Qrmrs. and Hon. Lts. to be Hon. Capts :—A. O. Hildyard (Nov. 12) ; H. B. Wall (Nov. 25).

Dec. 11.

Temp. Capt. G. H. Pollock relinquishes his commn. on account of ill-health, and is granted the hon. rank of Capt. (Dec. 12).

Dec. 13.

Temp. Lt. to be temp. Capt. :—M. Cahill (Nov. 20).

The following casualties are reported :—

KILLED—Capt. J. Sherley, attd. R.F.A.

DIED OF WOUNDS—Capt. R. E. Leach, attd. R.F.A.
Act. Sgt. G. Hislop, 11275 (Edinburgh).

DIED—Pte. A. Kent, 19825 (Manchester).

WOUNDED—Capt. C. Tracy, attd. R.F.A.
Capt. A. W. Campbell.

OBITUARY.

ROBERT EDWARD LEACH, Temp. Capt. A.V.C., The Chestnuts, Newmarket.
Graduated, Lond : July, 1912.

Mr. E. H. Leach, F.R.C.V.S., of Newmarket, has received news that his eldest son, Capt. Robert E. Leach died from wounds at the front on November 29th. Capt. Leach was 30 years of age, and since he obtained his diploma had assisted his father in his important practice. He joined the army just after the outbreak of the war, and had been serving in France since the Spring of 1915.—*East Anglian Daily Times.*

JAMES SHERLEY, Bedale, Temp. Capt. A.V.C.,
Lond : June, 1888.

Mrs. A. E. METTAM and Family desire to return thanks for all kind enquiries and expressions of sympathy tendered to them in their recent bereavement, also for floral tributes.

Dublin, 11th Dec.

Cruelty to a dog in Birmingham.

In the Third Court of Birmingham Police, on Nov. 27th, Edward Timmings, fitter's labourer, 128 Anthony Road, Saltley, was summoned for neglecting a Great Dane Bitch, in such a manner as to cause it unnecessary suffering. Mr. G. Botteley prosecuted on behalf of the Birmingham Society for the Prevention of Cruelty to Animals.

On Nov. 12, the animal was found in a coal-house at the back of defendant's house by Inspector Beesley. She was lying on the bare ground, and there were no signs of food, water, or bedding. The animal had gnawed the door-post and also its own fore-leg. She was taken away, and without any medicinal treatment she increased from 57½ lb. to 66 lb. in a week, and to 73 lb. in 13 days. A similar Great Dane bitch weighed 90 lb.

Mr. Woodward, M.R.C.V.S., said the dog's condition was simply due to starvation; there was no sign of disease to account for the animal's emaciated state. A photograph was put in showing that the animal was little better than a skeleton at the time it was rescued by Mr. Beesley.

Defendant denied that he had neglected the dog, and said he had tried his best to increase the dog's weight without success.

The Chairman (Mr. Arnold E. Butler) said it was the worst case in connection with poor animals that the magistrates had had before them. They did not feel that justice would be met by giving defendant the opportunity of paying a fine. He would be sent to gaol for two months.

A substitute for Iodine Tincture.

A highly placed German veterinary surgeon states from long experience that tincture of iodine can be effectively replaced by the following mixture: $FeSO_4$, 5; tannin (dissolved in spirit), 5; acid carbol. liq., 1; water to 100. Carbolic ink, as he calls it, is stated to be both disinfecting and drying to wounds.

Mountain Sheep.

When the report on the Census of Production Act was prepared estimates were made of the numbers of sheep of each British variety, and although the data on which the figures were founded must have been very incomplete, it appears that of the total of 27 millions included over 5,000,000 were Blackfaces alone, 2,650,000 Cheviots, 2,000,000 Welsh, and 1,173,000 "Scotch," probably mountain bred, and 531,000 Herdwicks, quite apart from Lonks, Dartmoors, Exmoors, Limestones, and other types of pure and cross-bred sheep. Thus more than one-half the sheep in England, Scotland, and Wales consist of mountain varieties.

NOTES ON EXAMINATIONS.

Sir,—Veterinary Students, I feel sure, are under obligation to "An Examiner" for his hints on the art of passing examinations. But I venture to suggest the debt would have been greater had "An Examiner" paid less attention to precept and platitude in his essay and more attention to grammar. Badly constructed and lumbering sentences, split infinitives and liberties with the laws of syntax are hardly excusable in those who sit, or have sat, in the seat of judgment.—Yours truly,

PRÉCIS.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.		Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡			Swine Fever.	
		Out-breaks (a)	Animals.	Out-breaks (a)	Animals.	Out-breaks (b)	Animals.	Out-breaks (b)	Animals.	Sheep Scab. (b)	Out-breaks (a)	Slaughtered. *
GT. BRITAIN. Week ended Dec. 8		9	8				2	68	118	18	20	6
Corresponding week in	1916 ...	12	17					46	85	21	54	17
	1915 ...	18	18	7	32	2	4	34	91	13	62	134
	1914 ...	15	15			3	4			5	87	574
Total for 49 weeks, 1917		400	455			24	53	2328	4344	475	2033	856
Corresponding period in	1916 ...	509	607	1	24	45	114	1973	4348	284	4111	9061
	1915 ...	546	612	55	701	48	84	809	1752	201	3776	16022
	1914 ...	679	740	24	124	94	279	1530	2642	193	4143	38342

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive.
(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked:—Worcester 2
Board of Agriculture and Fisheries, Dec. 11, 1917 Excluding outbreaks in army horses.

IRELAND. Week ended Dec. 1	...	...	...	...	...	...	Outbreaks ...	16	1	2
Corresponding Week in 1916 ...	...	...	...	...	...	...	...	9	3	19
1915 ...	...	...	...	...	...	...	3	7	9	18
1914 ...	...	...	...	...	...	...	1	4	3	2
Total for 48 weeks, 1917 ...	3	5	...	...	1	1	41	376	196	1127
Corresponding period in 1916 ...	3	7	...	...	...	...	59	415	294	1710
1915 ...	2	2	...	...	1	3	68	378	236	1307
1914 ...	1	1	76	957	...	...	74	454	185	919

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Dec. 3, 1917.
NOTE.—The figures for the Current Year are approximate only. * As diseased or Exposed to Infection